CAIV AND RISK MANAGEMENT: SOME ISSUES AND SOLUTIONS

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CAIV AND RISK MANAGEMENT

CAIV and Risk Management Process Level Issues

- CAIV and risk management not adequately linked
  - Education, training and incentives are needed
- Institutional inertia (resistance to change) often exists
  - More active interfacing of cost, risk, design and requirements personnel needed (behavior not just organizational structure)
  - Strengthen CAIV and risk management process linkages through program management and system engineering
- No single best way of performing CAIV and risk management, but many incomplete and/or flawed methods
  - Enhanced, well documented processes needed
- Different buyer and seller objectives can interfere with process implementation
  - Recognition and acceptance of different objectives is needed

CAIV AND RISK MANAGEMENT

CAIV and Risk Planning Issues

- Little formal CAIV and risk planning typically occurs
  - Develop CAIV and risk plans on programs with sufficient size
- CAIV and risk planning typically not linked
  - Link processes and planning activities
  - CAIV and risk management part of program management and/or systems engineering higher level processes
  - Perform training
  - Ensure resources available
  - Use risk planning to help identify LCC drivers and items that can benefit from CAIV trades
- CAIV and risk plans not tailored to program requirements
  - Tailor to program scope

CAIV AND RISK MANAGEMENT

CAIV and Risk Identification Issues

- Difficulty in identifying potential risks
  - Clearly defined and stable WBS facilitates C/P/S/risk trades and overall CAIV and risk management processes
  - Remove behavioral barriers and provide inducements to identifying risks
  - Actively facilitate cost, design, risk and user personnel working in parallel (behavior not just organizational structure)

CAIV AND RISK MANAGEMENT

CAIV and Risk Analysis Issues

- Methodologies used are often flawed
  - Mathematical operations performed on values derived from uncalibrated ordinal risk scales yield meaningless results
  - Rollups of such scores also yield meaningless results
- C/P/S risk results are often not well integrated and linked with CAIV trades
  - Perform integrated C/P/S risk assessments and tie-in with CAIV
- Cost risk impact on LCC, schedule risk impact on Integrated Master Schedule and performance risk impact on design may not be adequately linked in CAIV trades
  - Improved linkage is needed between risk management, design, requirements flowdown, life cycle costing, and other processes and activities

CAIV AND RISK MANAGEMENT

CAIV and Risk Handling Issues

- Selected approaches may not be viable or effective
  - Determine option (assumption, avoidance, control and transfer)
  - Identify C/P/S metrics
  - Identify anticipated C/P/S risk handling results
  - Develop risk handling plans for medium and high risk items
- Resources may not be available to implement risk handling plans
  - Identify resources to address key risk issues in accordance with risk handling plans
  - Preserve identified resources to the extent possible

CAIV AND RISK MANAGEMENT

CAIV and Risk Monitoring Issues

- C/P/S monitoring data often cannot be overlaid
  - Need data available at same WBS level
- Monitoring results often not well integrated into the program
  - Feedback the results into risk management and CAIV processes
  - Use results in decision making
- C/P/S data are often subjectively examined
  - Objectively evaluate data, identify sources of deviations versus planned values and initiate corrective action
  - Develop and use explicit and agreed upon evaluation criteria tailored to the program